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PATENT  
R.D. [unclear]  
10/16/02

CUSTOMER NO. 22186

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Attorney Docket No. Wang 2

In re application of: Zhenyu Wang

Serial No.: 09/324,304  
Filed: 06/02/99  
Matter No.: 992.1077

Group Art Unit: 2631  
Examiner: Williams, Demetria  
Phone No.: 703-305-4078

For: Constellation Design for Modem Receiver

AMENDMENT UNDER 37 CFR 1.111

RECEIVED  
OCT 16 2002  
Technology Center 2800

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

In response to the office action of 06/19/02, please amend the application as follows:

IN THE SPECIFICATION

Amend paragraph beginning at page 3, line 11, as follows.

-- FIG. 12 shows an example of the conditional probability density functions (i.e. "pdf") for the different transmitted messages t1-t4. The probability density functions for each message do not end at the boundaries between messages t1-t4, rather the pdfs overlap. The overlapping of the pdfs [give] gives rise to errors in the minimum distance decoding receiver of FIG. 11. In particular, a receiver can decide that message t3 was transmitted when message t4 was actually transmitted. These errors in the minimum distance decoding receiver can arise because current models assume that noise in the channel is independent of signal strength.--

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| 01 FC:102 | 924.00 OP |   |   |   |   |
| 02 FC:103 | 252.00 OP | * | * | * | * |

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Certification Under 37 CFR 1.8

03 FC:115      Date of Deposit 10-01-2002

I hereby certify that this correspondence is being deposited in the United States Postal Service with sufficient postage as first class mail under 37 CFR 1.8 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Amy Laudenslager  
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